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EXAMINER

DANIEL JR, WILLIE J

ART UNIT PAPER NUMBER

2686

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,654

Applicant(s)

MAYR, BERNHARD

Examiner

Willie J. Daniel, Jr.

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to application filed on 28 March 2005. **Claims 1-9** are now pending in the present application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding **Claim 9**, the claim recites the limitations "...signaling a mobile station and the second transceiver unit from a **controller** to indicate that a handover is to occur..." and "...proceeding with the handover at the second transceiver unit based on the code word and signaling from the **controller**." The instant application provides support for the radio communications system the signal (see pg. 6, [0023], lines 1-6; [0024], lines 1-3), which does not state a specific element such as the controller. The Examiner respectfully requests the applicant to provide the page(s), line(s), and/or drawing(s) that support the claimed features of the instant application and any supportive comments to help resolve the current issue(s).

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3. This list of examples is not intended to be exhaustive. The Examiner respectfully requests the applicant to review all claims and clarify the issues as listed above as well as any other issue(s) that are not listed.

Claim Objections

4. **Claim 9** objected to because of the following informalities:
 - a. The claim recites "...codeword differentiating..." in line 9 of the claim. The Examiner interprets as "...code word differentiating."Appropriate correction is required.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "**controller**" (see claim 9) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description

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of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. This list of examples is not intended to be exhaustive.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 7, 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Bodin (US 6,122,512).

Regarding **Claim 1**, Bodin discloses a method for carrying out a handover procedure in a GSM mobile radio system which reads on the claimed "radio communications system" having a base transceiver station (BTS1) which reads on the claimed "first transmitting/receiving unit", a base transceiver station (BTS2) which reads on the claimed "second transmitting/receiving unit" and base transceiver station (e.g., BTS, BTS3) which

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reads on the claimed “further transmitting/receiving units” (see col. 5, lines 16-30; Fig. 1), comprising:

switching a connection which reads on the claimed “radio link” connecting a mobile station (MS) and the first transmitting/receiving unit (BS1), to the second

transmitting/receiving unit (BS2) (see col. 6, lines 28-36; col. 5, lines 46-51; Figs. 1, 7),

sending a handover access message signal which reads on the claimed “handover signaling message” from the mobile station (MS) to the second transmitting/receiving unit (BS2) in order to set up a connection to the second transmitting/receiving unit (BS2), which handover signaling message contains a HO reference value (control data) which reads on the claimed “code word” identifying a handover procedure, the code word having a value corresponding to a handover code which is reserved for handover procedures in the radio communications system, the handover signaling message being sent via a physical channel, which also carries signaling messages for setting up a radio link to the radio communications system (see col. 6, lines 25-50; col. 5, lines 46-55; col. 5, line 67 - col. 6, line 1; Figs. 1, 7),

checking the code word at one of the further transmitting/receiving units (BTS), when a signaling message (access signal) is received on the physical channel with a code word, the code word being checked to determine whether the value thereof corresponds to the handover code and decide whether the signaling message should or should not be regarded as a handover signaling message (see col. 7, lines 1-6; col. 6, lines 5-9, 43-50; col. 5, lines 16-22; Fig. 1), where the MS transmits messages to the neighboring base station for handoff and the message is checked for the correct control data, and

identifying the signaling message received at the one of the further transmitting/receiving stations (BTS) as a handover signaling message on the basis of the code word (see col. 7, lines 1-6; col. 6, lines 5-9, 43-50; col. 5, lines 16-22; Fig. 1), where the MS transmits messages to the neighboring base station for handoff.

Regarding **Claim 2**, Bodin discloses the method as claimed in claim 1, wherein the handover code is stored in each of the transmitting/receiving units (BTS) (see col. 7, lines 1-4; col. 6, lines 45-46), where the base station (BTS) check for the correct control data (HO reference value) in which the “handover code is stored” would be inherent to verify the correct code,

the value of the code word received with a signaling message is compared with the handover code stored in each of the further transmitting/receiving units (BTS) (see col. 7, lines 1-4; col. 6, lines 45-46; Figs. 1, 7), where the base station (BTS) check for the correct control data (HO reference value) in which the “handover code is stored” would be inherent to verify the correct code,

if the value of the code word matches the handover code, the signaling message is identified as a handover signaling message (see col. 7, lines 1-4; col. 6, lines 45-46; Fig. 7).

Regarding **Claim 7**, Bodin discloses the method as claimed in claim 1, wherein at least one of the transmitting/receiving units (BTS) is a base station (BTS) (see col. 5, lines 16-22; Figs. 1, 7-8).

Regarding **Claim 9**, Bodin discloses a handover method for a radio communications system having a first, second and further transceiver units (BTS) (see col. 5, lines 16-30; Figs. 1, 7), comprising:

signaling a mobile station (MS) and the second transceiver unit (e.g., BTS2) from a controller (BSC) to indicate that a handover is to occur (see col. 6, lines 25-40; Figs. 1 and 7), where the BSC provides signaling commands for the connections to be handed over from BTS1 to BTS2;

sending a handover signaling message (e.g., handover access message) from the mobile station (MS) to the second transceiver unit (e.g., BTS2) in order to set up a connection to the second transceiver unit (e.g., BTS2), the handover signaling message being sent via a channel, which also carries signaling messages for requesting a radio link, the handover signaling message (e.g., handover access message) containing a code word differentiating the handover signaling message (e.g., handover access message) from signaling messages for requesting a radio link (see col. 6, lines 25-51; col. 5, lines 46-55; col. 5, line 67 - col. 6, line 1; col. 7, lines 1-4; Figs. 1, 7), where the MS sends a handover access message to the BS which includes the control data (HO reference value) and the MS sends additional access signals to establish link to complete the handing off;

checking the code word at one of the further transceiver units (BTS) to determine whether a handover signaling message or a signaling message for requesting a radio link has been requesting a radio link has been received (see col. 7, lines 1-6; col. 6, lines 5-9,43-50; col. 5, lines 16-22; Fig. 1), where the MS transmits messages to the neighboring base station for handoff and the message is checked for the correct control data;

identifying the signaling message received at the one of the further transceiver stations (BTS) as a handover signaling message on the basis of the code word (see col. 7, lines 1-6; col. 6, lines 5-9,43-50; col. 5, lines 16-22; Figs. 1, 7), where the MS transmits messages to

the neighboring base stations for handoff in which the base station with a stronger signal that the MS is within range will be the base station to carry out the handover; and

proceeding with the handover at the second transceiver unit (e.g., BTS2) based on the code word and signaling from the controller (BSC) (see col. 6, lines 25-40; Figs. 1 and 7), where the BSC provides signaling commands for the connections to be handed over from BTS1 to BTS2

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-6, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodin (US 6,122,512) in view of Demetrescu et al. (hereinafter Demetrescu) (US 6,647,262 B1).

Regarding **Claim 3**, Bodin discloses the features

the HO reference value which reads on the claimed “value” of a code word received with a signaling message is compared to the handover code (see col. 7, lines 1-6; col. 6, lines 45-46; Fig. 7), where the message is checked for the correct control data,

if the value of the code word matches the handover code, the signaling message is identified as a handover signaling message (see col. 7; lines 1-6; col. 6, lines 45-50; Fig. 7). Bodin fails to disclose having the features wherein the handover code comprises a number of values, values of the handover code, and one of the values of the handover code. However,

the examiner maintains that the features wherein the handover code comprises a number of values, values of the handover code, and one of the values of the handover code was well known in the art, as taught by Demetrescu.

In the same field of endeavor, Demetrescu discloses the features wherein the handover reference number (HO_REFERENCE_N) which reads on the “handover code” comprises a number of values (see col. 4, lines 53-60; col. 6, line 47), where the handover reference number is an 8 bit number which provides a number of values, values of the handover code (see col. 4, lines 53-60; col. 6, line 47), where the handover reference number is an 8 bit number which provides a number of values to indicate handover, and one of the values of the handover code (see col. 4, lines 53-60; col. 6, line 47), where the handover reference number is an 8 bit number which provides a number of values that is used to indicate handover.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bodin and Demetrescu to have the features wherein the handover code comprises a number of values, values of the handover code, and one of the values of the handover code, in order to force handover of a mobile station to a selected cell of a multicell network, as taught by Demetrescu (see col. 2, lines 25-31).

Regarding **Claim 4**, Bodin discloses the features

the HO reference value which reads on the claimed “value” of a code word received with a signaling message is compared to the handover code (see col. 7, lines 1-6; col. 6, lines 45-46; Fig. 7), where the message is checked for the correct control data,

if the value of the code word matches the handover code, the signaling message is identified as a handover signaling message (see col. 7, lines 1-6; col. 6, lines 45-50; Fig. 7). Bodin fails to disclose having the features wherein the handover code comprises a number of values, values of the handover code, and one of the values of the handover code. However, the examiner maintains that the features wherein the handover code comprises a number of values, values of the handover code, and one of the values of the handover code was well known in the art, as taught by Demetrescu.

Demetrescu further discloses the features wherein

the handover reference number (HO_REFERENCE_N) which reads on the “handover code” comprises a number of values (see col. 4, lines 53-60; col. 6, line 47), where the handover reference number is an 8 bit number which provides a number of values,

values of the handover code (see col. 4, lines 53-60; col. 6, line 47), where the handover reference number is an 8 bit number which provides a number of values to indicate handover, and

one of the values of the handover code (see col. 4, lines 53-60; col. 6, line 47), where the handover reference number is an 8 bit number which provides a number of values that is used to indicate handover.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bodin and Demetrescu to have the

features wherein the handover code comprises a number of values, values of the handover code, and one of the values of the handover code, in order to force handover of a mobile station to a selected cell of a multicell network, as taught by Demetrescu (see col. 2, lines 25-31).

Regarding **Claim 5**, the combination of Bodin and Demetrescu discloses every limitation claimed, as applied above (see claim 3), in addition Bodin further discloses the method as claimed in claim 3, wherein

the mobile station (MS) receives from the radio communications system a command to initiate the handover procedure, which command contains information about the second transmitting/receiving unit (BTS2) and identifies the handover procedure (see col. 6, lines 28-32; Fig. 7),

the radio communications system transmits information about the handover procedure to the second transmitting/receiving unit (BTS2) (see col. 6, lines 32-40; Fig. 7), and

further transmitting/receiving units (BTS) which receive the handover signaling message from the mobile station (MS) check whether the code word contained therein has a value matching the handover code and, if the value matches the handover code, the further transmitting/receiving units reject the handover signaling message (see col. 7, lines 1-6; col. 6, lines 5-9, 43-50; col. 5, lines 16-22; Fig. 1), where the MS transmits messages to the neighboring base stations for handoff and the message is checked for the correct control data.

Regarding **Claim 6**, the combination of Bodin and Demetrescu discloses every limitation claimed, as applied above (see claim 4), in addition Bodin further discloses the method as claimed in claim 4, wherein

the mobile station (MS) receives from the radio communications system a command to initiate the handover procedure, which command contains information about the second transmitting/receiving unit (BTS2) and identifies the handover procedure (see col. 6, lines 28-32; Fig. 7),

the radio communications system transmits information about the handover procedure to the second transmitting/receiving unit (BTS2) (see col. 6, lines 32-40; Fig. 7), and

further transmitting/receiving units (BTS) which receive the handover signaling message from the mobile station (MS) check whether the code word contained therein has a value matching the handover code and, if the value matches the handover code, the further transmitting/receiving units reject the handover signaling message (see col. 7, lines 1-6; col. 6, lines 5-9, 43-50; col. 5, lines 16-22; Fig. 1), where the MS transmits messages to the neighboring base stations for handoff and the message is checked for the correct control data.

Regarding **Claim 8**, the combination of Bodin and Demetrescu discloses every limitation claimed, as applied above (see claim 6), in addition Bodin further discloses the method as claimed in claim 6, wherein at least one of the transmitting/receiving units (BTS) is a base station (BTS) (see col. 5, lines 16-22; Figs. 1, 7-8).

Response to Arguments

9. Applicant's arguments filed 28 March 2005 have been fully considered but they are not persuasive.

Examiner respectfully disagrees with applicant's arguments as the applied reference(s) provide more than adequate support and to further clarify (see the above claims and comments in this section).

10. Regarding applicant's argument on pg. 6, 4th paragraph - pg. 7, 1st paragraph, "Bodin does not disclose or suggest sending a handover signaling message that contains a code word identifying a handover procedure, the code word having a value corresponding to a handover code which is reserved for handover procedures", the Examiner respectfully disagrees. Bodin discloses sending a handover signaling message (handover access message) that contains a code word (control data - HO reference value) identifying a handover procedure, the code word (control data - HO reference value) having a value (HO reference value) corresponding to a handover code (HO reference value) which is reserved for handover procedures (see col. 6, lines 43-51; col. 7, lines 1-6), where the system uses a handover access message that includes control data (HO reference value).
11. Regarding applicant's argument on pg. 7, 5th paragraph, "Bodin does not disclose checking the code word at one of the further transmitting/receiver units", the Examiner respectfully disagrees. Bodin discloses checking the code word (control data) at one of the further transmitting/receiver units (e.g., BTS2 or BTS3) (see col. 7, lines 1-6; col. 6, lines 5-9, 43-50; col. 5, lines 16-22; Fig. 1), where the MS transmits messages to the neighboring base stations (e.g., BTS2 or BTS3) for handoff and the message is checked for the correct

control data. As shown in Fig. 1, the MS is in the cell area of base station BTS1 and the neighbor base stations (e.g., BTS2 or BTS3) are potential handoff base stations which are further base stations beyond the current cell the MS is located within. Applicant admits that Bodin has the ability to transmit base stations BTS3 and BTS2 (see remarks - pg. 7, 6th paragraph, lines 1-3) in which the MS is in the area of BTS1 as shown in Fig. 1.

12. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., ...will not over load the system... - see pg. 7, 6th paragraph, line 5) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (571) 272-7907. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WJD,JR
05 August 2005


CHARLES APPIAH
PRIMARY EXAMINER